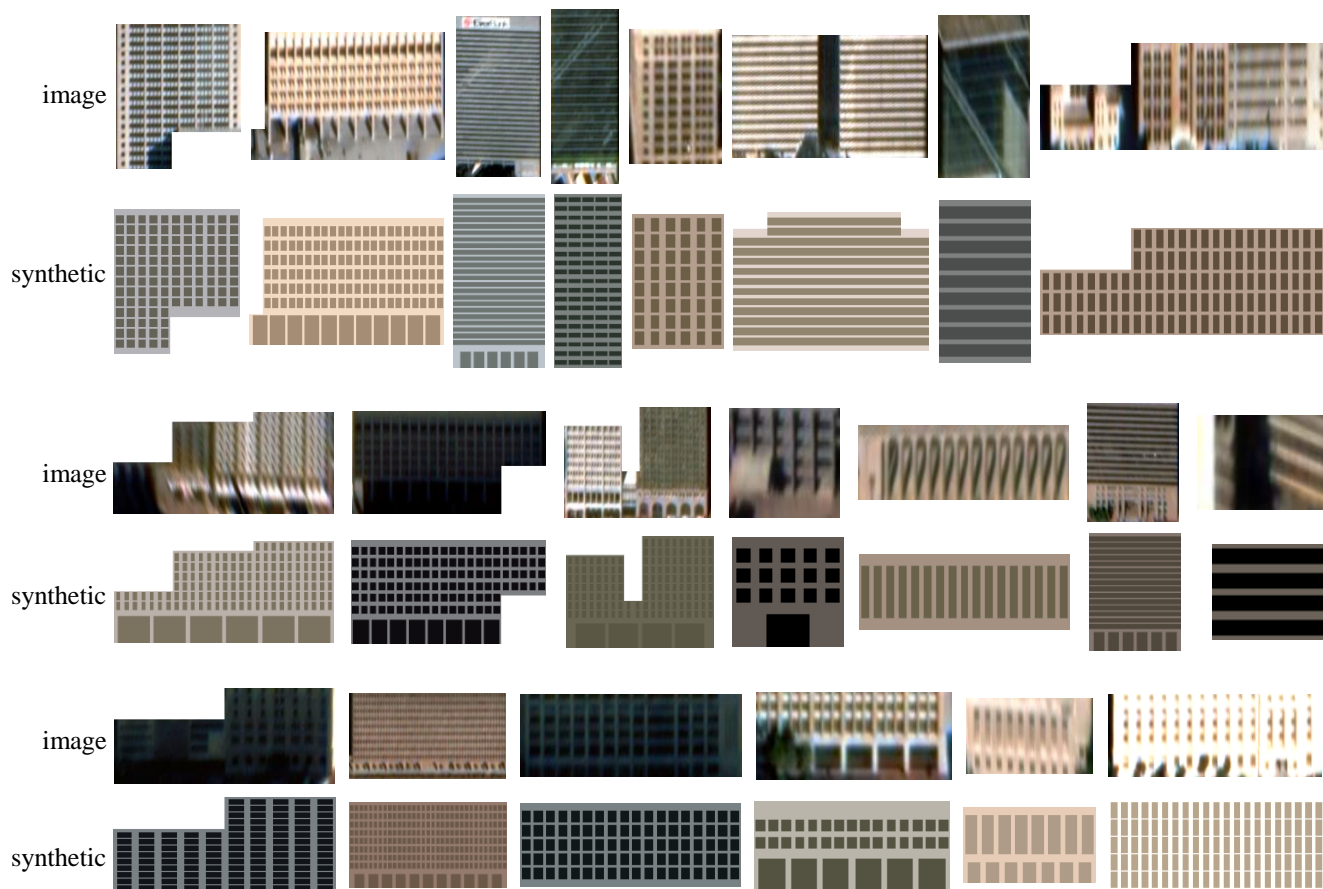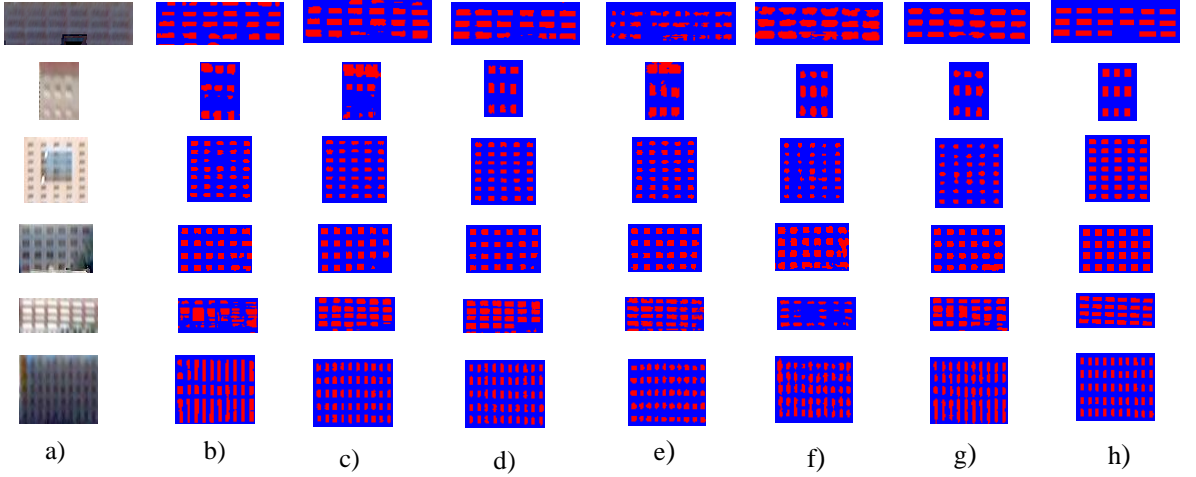# Supplemental Material:
Synthesis and Completion of Facades from Satellite Imagery

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Supplemental Figure 1: *Example Facades*. We show satellite façade images and our synthesized facades in alternating rows.

Supplemental Figure 2: *Segmentation Qualitative Comparison*. a) Original facades. b) to g) are corresponding to segmentation from Pix2Pix_256, Pix2Pix_128, Pix2Pix_96, Pix2Pix_64, DeepLab v3+ and EncNet respectively. h) Manually created segmentation ground truth.

**Supplemental Table 1**: *Segmentation Models*. We show configuration details for the segmentation models we trained from scratch.

| Models	Input	Output	Generator/BackBone	Discriminator	Batch Size	Training Time
Pix2Pix_256	256x256	256x256	unet_256	70x70 PatchGAN	1	2 hours
Pix2Pix_128	128x128	128x128	resnet_6blocks	70x70 PatchGAN	1	2 hours
Pix2Pix_96	96x96	96x96	resnet_6blocks	34x34 PatchGAN	1	2 hours
Pix2Pix_64	64x64	64x64	resnet_6blocks	34x34 PatchGAN	1	2 hours
DeepLab v3+	286x286	286x286	xception_65	–	4	1 day
EncNet	286x286	286x286	resnet101	–	4	1 day

Our synthetic buildings rendered within Google Earth.
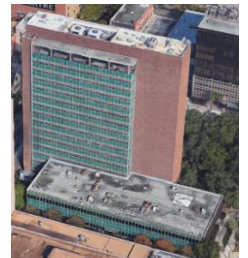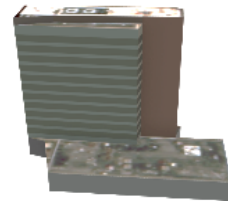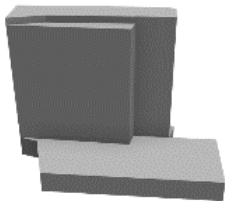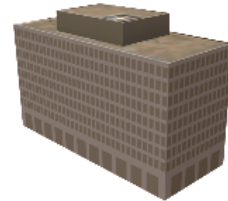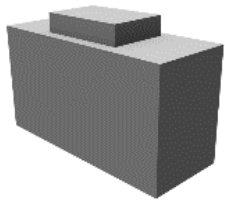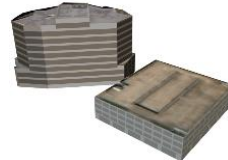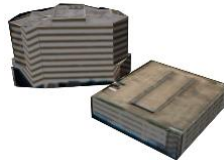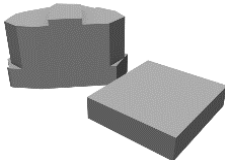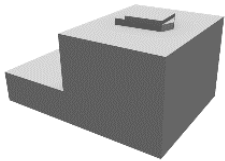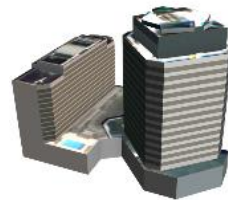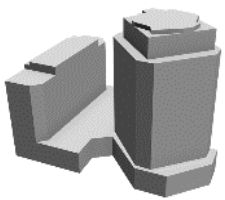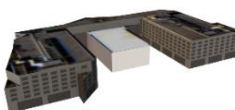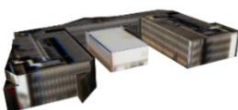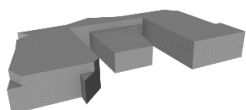
| syn. building | proj. tex map | syn. facades | Google Earth comparison |

Supplemental Figure 3a: *Buildings*. We show additional results of Area A1 and some building close-ups. Please note that the Google Earth comparison is *not* the input imagery – they are aerial images captured at much higher resolution and with the building facades at a much more head-on viewing angle.
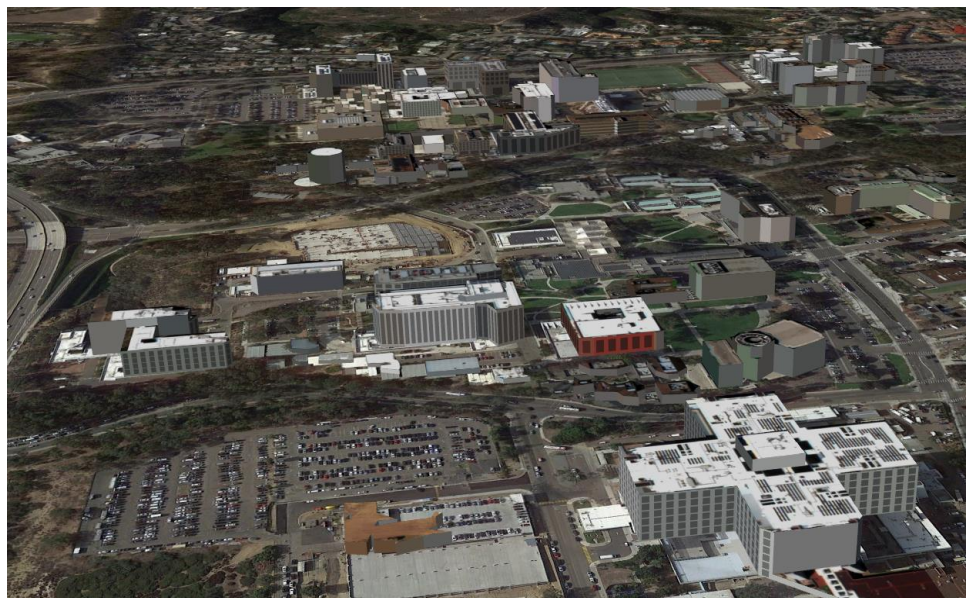
Our synthetic buildings rendered within Google Earth.
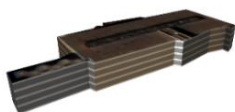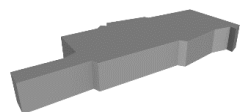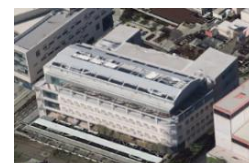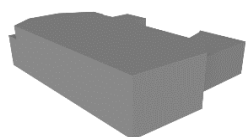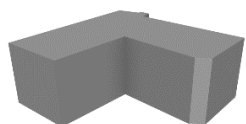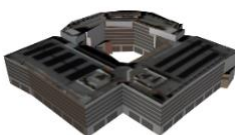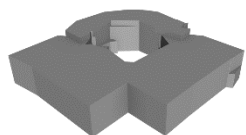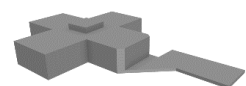

| syn. building | proj. tex map | syn. facades | Google Earth comparison |

Supplemental Figure 3b: *Buildings*. We show additional results of Area A2 and some building close-ups. Please note that the Google Earth comparison is *not* the input imagery – they are aerial images captured at much higher resolution and with the building facades at a much more head-on viewing angle.